

filter circuit coupled to send the filtered data in the external format to the input of the data packer.

2. (Amended) The device of claim 1 wherein the data packer further has a second input adapted to receive data containing [computer] graphics in the external format.

3. (Original) The device of claim 1 further comprising:

a line buffer write control circuit, adapted to receive an external control signal including a clock, adapted to send a line buffer write control signal to the first and second line buffers, and coupled to send a data packer control signal to the data packer, for generating the line buffer write control signal and the data packer control signal in response to the external control signal; and

a line buffer read control circuit, adapted to receive the external control signal, adapted to send a line buffer read control signal to the first and second line buffers, and coupled to send a data unpacker control signal to the data unpacker, for generating the line buffer read control signal and the data unpacker control-signal in response to the external control signal.

4. (Original) The device of claim 3 wherein the line buffer read control signal comprises:

a first read pulse for reading from the first line buffer; and
a second read pulse for reading from the first line buffer.

5. (Original) The device of claim 4 wherein:

a first read pulse increments a first pointer to the first line buffer; and
the second read pulse increments a second pointer to the first line buffer.

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6. (Amended) The device of claim 1 further comprising:

a color space converter adapted to receive data in a second external format, for converting the data from the second external format to the external format.

7. (Original) The device of claim 6 wherein the second external format is an RGB format; and the external format is a 4:4:4 signed YCrCb format.

8. (Original) The device of claim 1 wherein the external format is a 4:4:4 signed YCrCb format.

9. (Original) The device of claim 8 wherein the internal format is programmable selected from a group consisting of a 4:4:4 YCrCb format, a 4:2:2 YCrCb format, and a 4:1:1 YCrCb format.

10. (Original) The device of claim 1 further comprising:
an output control circuit adapted to receive a non-interlaced mode control signal and adapted to send an interlaced mode control signal, for converting the non-interlaced mode control signal to the interlaced mode control signal.

11. (Original) The device of claim 10 wherein:
the non-interlaced mode control signal includes a first horizontal sync signal, a first vertical sync signal, a vertical blank signal, and a horizontal blank signal; and
the interlaced mode control signal includes a second horizontal sync signal, a second vertical sync signal, and a blank signal.

12. (Original) A method for flicker filtering a plurality of non-interlaced lines to form a plurality of interlaced lines, the method comprising the steps of:
receiving a non-interlaced line in an external format;
converting the received non-interlaced line from the external format to an internal format;
retrieving an intermediate line in the internal format from a line buffer;

combining the non-interlaced and intermediate lines to form a filtered line in the internal format; and

converting the filtered line from the internal format to the external format to form an interlaced line.

13. (Original) The method of claim 12 wherein the external format is a 4:4:4 signed YCrCb format.

14. (Original) The method of claim 13 further comprising the step of:
selecting the internal format from a group consisting of a 4:4:4 YCrCb format, a 4:2:2 YCrCb format, and a 4:1:1 YCrCb format.

15. (Amended) A method for flicker filtering a plurality of noninterlaced lines to form a plurality of interlaced lines, each interlaced line formed from two non-interlaced lines, the method utilizing a line buffer and comprising the steps of:

receiving a first non-interlaced line in an external format, converting said line to an internal format, and writing said line in the internal format to a line buffer;

[simultaneously] reading the first non-interlaced line from the line buffer and converting said line to the external format;

receiving a second non-interlaced line in the external format, and combining the first and second non-interlaced lines to form an interlaced line; and

converting the interlaced line to the internal format and writing the interlaced line in the internal format to the line buffer, wherein the step of writing the interlaced line to the line buffer overlaps in time with the step of reading the first non-interlaced line from the line buffer. [; and]

[repeating the above steps to form a plurality of interlaced lines].

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16. (Amended) A method for flicker filtering a plurality of noninterlaced lines to form a plurality of interlaced lines, each interlaced line formed from three non-interlaced lines, the method utilizing two line buffers and comprising the steps of:

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receiving a first non-interlaced line in an external format, converting said line to an internal format, and writing said line in the internal format to a first line buffer;
receiving a second non-interlaced line in the external format, converting said line to the internal format, and writing said line in the internal format to a second line buffer;
[simultaneously] reading the first non-interlaced line in an internal format from the first line buffer and converting said line to an external format;
reading the [a] second non-interlaced line from the [a] second line buffer and converting said line to the external format;
receiving a third non-interlaced line in the external format, and [writing said line to the second line buffer,] combining the first, second and third non-interlaced lines to form an interlaced line; and
converting the interlaced line to the internal format and writing the interlaced line in the internal format to the second [first] line buffer, wherein the step of writing the interlaced line to the second line buffer overlaps in time with the step of reading the second non-interlaced line from the second line buffer. [; and]
[repeating the above steps to form a plurality of interlaced lines.]

17. (Amended) A method for flicker filtering a plurality of noninterlaced lines to form a plurality of interlaced lines, each interlaced line formed from three non-interlaced lines, the method utilizing two line buffers and comprising the steps of:

receiving a first non-interlaced line in an external format, converting said line to an internal format, and writing said line in the internal format to a first line buffer;
[simultaneously] reading the [a] first non-interlaced line from the [a] first line buffer and converting said line to the external format;

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receiving a second non-interlaced line in the external format, and combining the first and second non-interlaced lines to form an intermediate line;
converting the intermediate line to the internal format and writing the intermediate line in the internal format to a second line buffer;
[simultaneously] reading the intermediate line from the second line buffer and converting said line to the external format;
receiving a third non-interlaced line in the external format and [writing said line to the first line buffer,] combining the intermediate and third non-interlaced lines to form an interlaced line; and
converting the interlaced line to the internal format and writing the interlaced line to the second line buffer, wherein the step of writing the interlaced line to the second line buffer overlaps in time with the step of reading the intermediate line from the second line buffer. [; and]
[repeating the above steps to form a plurality of interlaced lines.]

18. (Amended) A method for flicker filtering a plurality of non-interlaced lines to form a plurality of interlaced lines, each interlaced line formed from three non-interlaced lines, the method utilizing two line buffers and comprising the steps of:

receiving a first non-interlaced line in an external format, converting said line to an internal format, and writing said line in the internal format to a first line buffer;
[simultaneously] reading the [a] first non-interlaced line from the [a] first line buffer and converting said line to the external format;
receiving a second non-interlaced line in the external format, and combining the first and second non-interlaced lines to form an intermediate line;
converting the intermediate line to the internal format and writing the intermediate line to the first line buffer, wherein the step of writing the intermediate line to the first

line buffer overlaps in time with the step of reading the first non-interlaced line from the first line buffer;

[simultaneously] reading the intermediate line from the first line buffer and converting said line to the external format;

receiving a third non-interlaced line in the external format and [writing said line to the first line buffer,] combining the intermediate and third non-interlaced lines to form an interlaced line; and

converting the interlaced line to the internal format and and writing the interlaced line to a second line buffer. [; and]

[repeating the above steps to form a plurality of interlaced lines.]

REMARKS

Claims 1-18 were presented for examination. Claims 1-18 were rejected.

Applicants are hereby amending claims 1, 2, 6 and 15-18 to more clearly claim their invention.

Reconsideration of this application as amended, and allowance of all pending claims, claims 1-18 as amended, are hereby respectfully requested.

The objections to the drawings are noted. Applicants request that the requirement for formal drawings be held in abeyance pending allowance of a claim in this application.

The objection to the title is noted. Applicants have amended the title according to the Examiner's suggestion and submit that the title has been appropriately corrected.

Claims 16-18 have been rejected under 35 U.S.C. § 112, first paragraph, as not supported by the specification. These claims have been amended in consideration of the Examiner's comments and suggestions. In particular, the term "simultaneously" has been deleted and

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